106-1393

## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: October 6, 1981

Forwarded to:
Honorable J. Lynn Helms
Administrator
Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, D.C. 20591

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SAFETY RECOMMENDATION(S)

A-81-132 through -138

On the morning of October 7, 1980, a chain of events occurred in which several aircraft were in proximity of other aircraft with less than standard separation in the vicinity of the Hartsfield International Airport, Atlanta, Georgia. All of these aircraft were under the positive control of the Atlanta Approach Control Facility. In at least two instances the pilots of air carrier aircraft found it necessary to take evasive action to avoid a potential collision. In one case, the pilot of an Eastern Airlines Boeing 727 added power so quickly, to avoid another Eastern Airlines Lockheed L-1011, that the maximum exhaust gas temperature limits of all three engines were exceeded. The Safety Board investigated the events surrounding this incident and issued a Special Investigation Report. 1/ Based on information contained within the report, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Upgrade the simulation program at terminal facilities equipped with automated radar so that radar training and testing may be accomplished mainly via simulation. Consideration should be given to a system similar to that at the FAA's radar training facility in Oklahoma City. (Class II, Priority Action) (A-81-132)

When an improved simulation system is acquired at terminal facilities, require controllers to periodically demonstrate a predetermined level of skill similar to the manner in which the FAA requires air carrier pilots to demonstrate proficiency on aircraft simulators. (Class II, Priority Action) (A-81-133)

Redesign the low altitude/conflict alert at ARTS III facilities so that the audio signal associated with the low altitude alert is readily distinguishable from that associated with the conflict alert and heard only by controllers immediately concerned with the involved aircraft. (Class II, Priority Action) (A-81-134)

<sup>1/</sup> For more information read, "Special Investigation Report--Aircraft Separation Incidents at the Hartsfield Atlanta International Airport, Atlanta, Georgia, October 7, 1980." (NTSB-SIR-81-6)

Redesign the low altitude/conflict alert system at ARTS III facilities so that the visual alert is unique, easily detected, and adequately contrasted when the data tag is in the handoff status. (Class II, Priority Action) (A-81-135)

Direct facilities whose airspace is configured in a manner similar to that of Atlanta Tower's (i.e. a "feeder" controller working two corridors which converge at the edge of the next controller's airspace) to review and establish procedures as necessary to provide altitude separation until longitudinal separation is assured. (Class II, Priority Action) (A-81-136)

Review the physical location of the various sectors' control positions to assess and optimize space utilization at Atlanta and in similar facilities nationwide to provide for direct communication and ease of coordination between closely interacting control positions. (Class II, Priority Action) (A-81-137)

Incorporate playback capability into the next generation of automated radar, both en route and terminal, so that actual problems involving a variety of traffic situations may be reviewed on the radar display for training purposes. (Class II, Priority Action) (A-81-138)

KING, Chairman, and BURSLEY, Member, concurred in these recommendations. GOLDMAN, Member, concurred in all but Recommendation A-81-132 and filed the comments below. DRIVER, Vice Chairman, and McADAMS, Member, did not participate.

By: James B. King Chairman

PATRICIA A. GOLDMAN, Member, filed the following additional comments:

I do not believe Safety Recommendation A-81-132 is justified. The special investigation had a very limited scope of inquiry, since it only examined the situation at Atlanta. The specific objectives of the recommendations were never identified. For example, it is not clear whether the proposed upgrade involved software or hardware modifications. Consequently, the cost implications of the recommendation are virtually unknown. This concerns me.

Certainly "safety" is the Board's primary concern, and we should not withhold a recommendation just because we have not completed a cost benefit analysis of the recommendation. On the other hand, I do not believe the Board should continue to issue recommendations without some sort of recognition regarding their practicality relative to cost.